

# Campbell

## X-RAY and HIGH FREQUENCY APPARATUS

FOR  
PHYSICIANS—HOSPITALS—DENTISTS  
AND  
INDUSTRIAL

6615

HIGHEST  
AWARD



MEDAL OF HONOR

PANAMA-PACIFIC  
INTERNATIONAL  
EXPOSITION  
SAN-FRANCISCO  
1915

Surex  
CAMPBELL ELECTRIC CO LYNN MASS U.S.A.



## PRICES IN EFFECT SEPTEMBER 1, 1920

Which supersede prices listed in all catalogues  
issued to date and made necessary to  
PRESERVE QUALITY



LYNN, Mass.

"The Plant That Serves You"

1920

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CAMPBELL ELECTRIC COMPANY  
LYNN, MASSACHUSETTS



## **Prices in Effect September 1, 1920**

## ALPHABETICAL LIST

Cat. No.		Prices
1076	Aerial System (Overhead Trolley), consisting of 2 Wall Boards, 3 Wall Insulators with Turnbuckles, 3 Wall Insulators without Turnbuckles, 80 feet Trolley Wire, 1 Trolley Reel with Wheels, and 1 Coolidge Tube Reel . . . . .	\$ 50.00
1067	Individual Parts. (For Aerial System.)	
1068	Wall Insulator (Strain) without Turnbuckle . . . . .	4.00
1069	Wall Board . . . . .	3.00
1070	Wall Insulator (Strain) with Turnbuckle . . . . .	4.50
1071	Trolley Wire, per foot . . . . .	.05
1072	9 feet Cord Reel, with Wheels . . . . .	6.00
1073	Trolley Wheel . . . . .	3.00
1074	Trolley Reel, with Trolley Wheels . . . . .	10.00
1075	Coolidge Tube Reel, with Trolley Wheels . . . . .	7.50
	2 foot H. T. Insulator Tubes for Connecting Rooms . . . . .	40.00
	Aerial H. T. Switch, complete . . . . .	30.00
2045	Ammeter, for Coolidge Filament Transformer . . . . .	7.00
2012	Angle Indicator . . . . .	15.00
1090	Apron, X-ray Protective . . . . .	4.00
1150	Army (U. S.) Manual . . . . .	3.50
1583	Atomizer . . . . .	20.00
1528	Auto Condensation Pad, with Cords . . . . .	85.00
1007	Auto Condensation Chair, with Leg Section (Head Section \$15 extra). . . . .	
	Bedside Units, See Coolidge Clinical and Clinette Units.	
2062	Benoist Penetrometer . . . . .	4.00
1512	Cabinet for Model "E" Coil of Clinette Portable Coolidge Unit . . . . .	30.00
1574	Cautery, Blade only . . . . .	2.00
1573	Cautery, Handle and Blade . . . . .	6.50
1053	Cassette, 5 x 7 (For Intensifying Screen) . . . . .	12.00
1054	Cassette, 8 x 10 (For Intensifying Screen) . . . . .	15.00
1055	Cassette, 10 x 12 (For Intensifying Screen) . . . . .	18.50
1056	Cassette, 11 x 14 (For Intensifying Screen) . . . . .	22.00
1057	Cassette, 14 x 17 (For Intensifying Screen) . . . . .	24.00
2097	Centering Rod for No. 6 Tube Stand . . . . .	7.50
1007	Chair, Auto Condensation, with Leg Section (Head Section \$15 extra). . . . .	85.00
	Chemicals (Photographic). (See Dark Room Supplies.)	
	"Clinix"—Self-Excited—Tube-Tilt Table—See Tables.	
	Coils	
2084	Coolidge Clinical Metal Cabinet Type, 3, 4 and 5" Gap, 0 to 30 M/A, A. C. . . . .	680.00
1592	Coolidge Clinette BEDSIDE, Portable Type, 0 to 30 milliamperes, 3" to 5" Spark Gap, Rheostat Control (Single Unit), A. C. . . . .	540.00
1593	Separate Auto Transformer Control for Clinette Portable Coil (Double Unit) . . . . .	100.00
1200	Coolidge DENTAL, Cabinet Type, A. C., 60 Cycle . . . . .	600.00
1511	Model "H", A. C., 50 to 60 Cycle . . . . .	150.00
1509	Model "E", A. C., 50 to 60 Cycle . . . . .	300.00
1504	Model "I", A. C., 50 to 60 Cycle . . . . .	500.00
1505	Model "I", A. C., 50 to 60 Cycle with Pump . . . . .	650.00
	Cones	
1020	No. 5A . . . . .	14.00
1021	No. 5B . . . . .	17.00
1016	No. 6A . . . . .	14.00
1017	No. 6B . . . . .	17.00
1018	No. 6C . . . . .	14.00
1019	No. 6D . . . . .	14.00
1518	No. 12A . . . . .	10.00
1519	No. 12B . . . . .	10.00
	Coolidge Tubes	
1022	Fine Focus . . . . .	125.00
1023	Medium Focus . . . . .	125.00
1024	Broad Focus . . . . .	125.00
1270	Bedside, Radiator Type (Indicate whether 10 or 30 m/a) . . . . .	125.00
1029	Dental, Radiator Type . . . . .	125.00

"Clinix"—Self-Excited—Tube-Tilt Table—See Tables.

Coils		
2084	Coolidge Clinical Metal Cabinet Type, 3, 4 and 5" Gap, 0 to 30 M/A, A. C.	680.00
1592	Coolidge Clinette BEDSIDE, Portable Type, 0 to 30 milliamperes, 3" to 5" Spark Gap, Rheostat Control (Single Unit), A. C.	540.00
1593	Separate Auto Transformer Control for Clinette Portable Coil (Double Unit)	100.00
1200	Coolidge DENTAL, Cabinet Type, A. C., 60 Cycle	600.00
1511	Model "H", A. C., 50 to 60 Cycle	150.00
1509	Model "E", A. C., 50 to 60 Cycle	300.00
1504	Model "I", A. C., 50 to 60 Cycle	500.00
1505	Model "I", A. C., 50 to 60 Cycle with Pump	650.00
Cones		
1020	No. 5A	14.00
1021	No. 5B	17.00
1016	No. 6A	14.00
1017	No. 6B	17.00
1018	No. 6C	14.00
1019	No. 6D	14.00
1518	No. 12A	10.00
1519	No. 12B	10.00
Coolidge Tubes		
1022	Fine Focus	125.00
1023	Medium Focus	125.00
1024	Broad Focus	125.00
1270	Bedside, Radiator Type (Indicate whether 10 or 30 m/a)	125.00
1029	Dental, Radiator Type	125.00



## ALPHABETICAL LIST

25	Coolidge Tube Filament Transformer with Control, A. C. (Specify Voltage) .....	\$85.00
45	Coolidge Tube Ammeter for above Transformer .....	30.00
34	<b>Coolidge Units—Outfits.</b>	
11	Clinical Coil, Cabinet Type, Mahogany finish, A. C., 50 to 60 Cycle .....	680.00
17	(Will operate either 10 Milliamperes or 30 Milliamperes Tube with 3, 4 and 5" Gap.)	
10	Tube-stand, Counterweighted, Stereoscopic .....	190.00
0	Foot Switch, with Cable and Plug .....	30.00
1	Tube-shield, Lead Glass .....	25.00
4	Coolidge Radiator Bedside Tube .....	125.00
0	Outfit Complete .....	1050.00
2	Extra for Automatic Time Controller .....	60.00
3	Extra for use on 110 V. D. C., 10 Milliamperes .....	150.00
4	Bedside Coil, Clinette Portable Type, 0 to 30 Milliamperes, 3" to 5" Spark Gap, Rheostat Control (Single Unit), A. C., 110 Volt .....	540.00
0	Separate Auto Transformer Control for Portable Coil (Double Unit) .....	100.00
0	Tube Holder, Adjustable Bracket Type .....	60.00
0	Tube-shield, Lead Glass .....	25.00
0	Coolidge Radiator Bedside Tube .....	125.00
0	<b>Outfit Complete (Single Unit).</b> (Double Unit) .....	250.00
2	Extra for Stereoscopic Tube Holder (Catalog No. 2072) .....	850.00
2	Extra for Automatic Time Controller .....	35.00
2	Extra for use on 110 V. D. C., 10 Milliamperes .....	60.00
2	Dental-Coil, A. C., 50 to 60 Cycle, Wood Cabinet, Mahogany Finish .....	150.00
2	Tube Holder (Adjustable Bracket Type) .....	600.00
2	Foot Switch, with Cable and Plug .....	60.00
2	Tube-shield, Lead Glass .....	30.00
2	Coolidge Radiator Dental Tube .....	35.00
2	Outfit Complete .....	125.00
2	Extra for Stereoscopic Tube Holder (Catalog No. 2071) .....	850.00
2	Extra for Automatic Time Controller .....	35.00
2	Extra for use on 110 V. D. C. .....	60.00
2	Coolidge Tube Reel .....	100.00
2	Coolidge Tube Reel, with Trolley Wheels .....	8.00
2	Control Table for No. 12 SureX, instead of switchboard attached, difference extra .....	40.00
2	Cords .....	200.00
2	Connecting Cord, with Plugs .....	3.00
2	Heavy Cable, with Hook .....	2.00
2	Light Cable, with Hook .....	1.50
2	Cautery Cords (pair) .....	1.50
2	Bifurcated Cord .....	1.50
2	Treatment Chair Cord .....	1.50
2	Cord Reels. (See Reels.) .....	1.50
2	Dark Room Supplies .....	75.00
2	Developing Tank, stone .....	2.00
2	Developing Tank, plate racks, each, 5 x 7 .....	2.00
2	Developing Tank, plate racks, each, 6 1/2 x 8 1/2 .....	2.00
2	Developing Tank, plate racks, each, 8 x 10 .....	2.00
2	Developing Tank, plate racks, each, 10 x 12 .....	2.00
2	Developing Tank, plate racks, each, 11 x 14 .....	2.00
2	Developing Tank, plate racks, each, 14 x 17 .....	2.50
2	Developer, Eastman X-ray, 1/2 dozen packages (each makes 12 oz.) .....	.90
2	Fixing Powder (makes 64 oz.) .....	.25
2	Hard Rubber Fixing Box .....	18.50
2	Graduate, 8 ounces .....	.55
2	Graduate, 16 ounces .....	.75
2	Drying Rack .....	2.50
2	Mortar and Pestle .....	2.50
2	Ruby Lamp and Illuminator, 7" x 9" Ruby—5" x 8" White .....	12.00
2	Balance Scales .....	5.00
2	Thermometer Stirring Rod .....	1.00
2	Interval Timer (For Timing Development) .....	8.00
2	Trays, 8 x 10 .....	1.50



## ALPHABETICAL LIST

1129	Dark Room Supplies	
1130	Trays, 10 x 12 .....	\$3.
1131	Trays, 11 x 14 .....	4.
1132	Trays, 14 x 17 .....	6.
2046	Wash Box to hold 14 x 17 Plates (See Films and Plates.)	12.00
2047	Dental Units, see Coolidge Units	
2085	Developing Cabinet (Portable Dark Room)	45.00
2085	Developing Cabinet, with Trays, Films and Chemicals	50.00
1575	Developing Frame for Eastman Dupli-Tized Films, each	1.00
1576	Developing Tanks, Developer, etc. (See Dark Room Supplies.)	
2098	Diagnostic Lamp in holder .....	2.50
1122	Diagnostic Lamp Bulb .....	3.00
1122	Dosage Indicator, Grover's X-ray .....	3.00
1122	Drying Rack .....	3.00
1122	Dupli-Tized Films, Eastman, see Films	
1530	Electrodes. (Glass Vacuum.)	
1531	Pain Electrodes (set with handle) .....	10.00
1532	Surface Electrode .....	1.50
1533	Vaginal Electrode .....	1.50
1534	Rectal Electrode .....	1.50
1535	Urethral Electrode .....	1.50
1536	Nasal Electrode .....	1.50
1537	Throat Electrode .....	1.50
2096	Electrode Handle .....	1.50
2015	Blackman Hand Electrode .....	2.00
2016	Dental Electrodes (set with handle) .....	5.00
2017	Dental Surface Electrode .....	12.00
2018	Dental Cavity or Pulp Tester .....	1.75
2019	Dental Gum .....	1.75
2020	Dental Pyorrhea .....	1.75
2021	Dental Cataphoric .....	1.75
2021	Dental Handle, with Cord .....	3.50
1538	Insulated and Miscellaneous Electrodes	
1539	Insulated Vaginal .....	2.50
1540	Insulated Rectal .....	2.00
1541	Insulated Urethral .....	2.00
1542	Insulated Nasal .....	2.00
1543	Insulated Throat .....	2.00
1544	Insulated Ear .....	2.00
1545	Gothire Electrode .....	2.00
1546	Single Eye Electrode .....	2.50
1547	Double Eye Electrode .....	1.50
1548	Cataphoric Electrode .....	2.00
1549	Block Tin Electrode .....	4.00
1550	Treatment Chair, Vacuum Electrode .....	.75
1551	Treatment Chair, Hand Electrode, each .....	.75
1552	Fulguratum Treatment Chair, Hand Electrode, each .....	1.00
1553	Fulguratum Electrode Handle, with 2 Electrodes (Extra Electrode 25 cents)	3.50
1554	Moist Electrode, large .....	3.00
1555	Moist Electrode, small .....	2.50
1556	Metal Hand Electrode (pair) .....	.75
1557	Morse Moist Pads (set) .....	10.00
1558	Non-Vacuum Electrodes, any kind, each .....	7.50
2100	Envelopes (for filing plates) see Plate Containers	
2101	Eustachian Tube Inflator .....	
2102	Exposure Holders for Dupli-Tized Films, 5 x 7 each	.08
2103	Exposure Holders for Dupli-Tized Films, 8 x 10 each	.10
2104	Exposure Holders for Dupli-Tized Films, 10 x 12 each	.10
2105	Exposure Holders for Dupli-Tized Films, 11 x 14 each	.15
1105	Films, Dental, 1 1/4" x 1 15/16", per dozen .....	.50
1106	1 1/4" x 2 1/4", per dozen .....	.50
1107	1 1/4" x 2 1/4", per dozen .....	.50

Clinix Tube Tilt Table without Stand, High Tension Transformer or Control, Motor Drive, Auto Control

Attachment, Motor Drive, Auto Control ..... 2200.00

Clinix Tube-tilt Table, No. 6 Tube-stand, 11 x 14 Fluoroscope Screen, Automatic Screen Attachment, Motor Drive, Auto Control, complete ..... 2500.00

Clinix Tube Tilt Table without Stand, High Tension Transformer or Control, with 11 x 14 Screen ..... 1650.00

Clinix Tube Tilt Table without Stand, Motor, High Tension Transformer or Control, with 11 x 14 Screen ..... 1550.00

Clinix Tube Stand Transformer, for No. 6 Tube Stand ..... 450.00

Fanks, see Dark Room Supplies

Thermometer Stirring Rod

Time Controller

1579	Vacuum Cups, small	1.50
1580	Vacuum Cups, medium	1.50
1581	Vacuum Cups, large	1.50
1035	View Box (Plate Illuminator), Size 17" x 17" with Nitrogen Lamps and Dimmer	60.00
1068	Wall Board	3.00
1067	Wall Insulator (Strain) without Turnbuckle	4.00
1132	Wash Box to hold 14 x 17 Plates	12.00
1070	Wire for Trolley System, per ft.	.05
2098	X-ray Dose Indicator, Grover's	3.00



## ALPHABETICAL LIST

Films, Eastman Dupli-Tized.		
Size 5" x 7" with envelopes, per doz.	\$1.25	
Size 6 1/2" x 8 1/2" with envelopes, per doz.	2.00	
Size 8" x 10" with envelopes, per doz.	2.85	
Size 10" x 12" with envelopes, per doz.	4.50	
Size 10" x 12" with envelopes, per doz.	4.50	
Size 11" x 14" with envelopes, per doz.	5.55	
Size 14" x 17" with envelopes, per doz.	8.75	
See price list Exposure Holders (for use with films)		
Film Chest, Dental Lead	12.00	
Film Clamps, for developing, per dozen	2.50	
Film Holders, for Dental Radiography, each	.75	
Film Holders, Exposure for Dupli-Tized Films, see Exposure Holders		
Film Illuminator, Dental	7.50	
Film Mounts, cardboard, per hundred	4.50	
Film Mounts, transparent, per hundred	5.50	
Filters, aluminum		
1 mm.	1.00	
2 mm.	1.50	
3 mm.	2.00	
Fixing Powder (make 64 oz.)	.25	
Fluoroscope		
5 x 7, Folding	35.00	
8 x 10, not Folding	50.00	
Fluoroscope Screens		
8 x 10	35.00	
10 x 12	52.00	
11 x 14	72.00	
14 x 17	102.00	
Fluoroscopy—Vertical, Horizontal, Angular. (See Tables.)		
Foil. Lead, for X-ray Protection in Treatment, per lb.	.50	
Foot Switch, heavy capacity, double contact, to control lamp	45.00	
Foot Switch, heavy capacity, single contact	30.00	
Gloves, opaque protective (plain)	52.00	
Gloves, opaque protective (gauntlet)	75.00	
Graduate, 8 ounces	95.00	
Graduate, 1 1/2 ounces	135.00	
Grover's X-ray Dose Indicator	15.00	
Hard Rubber Fixing Box	18.50	
High Tension Transformer for No. 6 Tube Stand with Clinix Holders, Exposure for Dupli-Tized Films, see Exposure Holders	450.00	
Illuminator, Negative (with Nitrogen Lamps and Dimmers) Illuminator and Ruby Lamp combined, for up to 8 x 10 Plates	60.00	
Indicator, X-ray Dose, Grover's	12.00	
Instruments, Switchboard (set) with handle	3.00	
Mouth Lamp	35.00	
Antrum Lamp	4.50	
Root Canal Drier	4.50	
Gutta-Percha Excavator	4.50	
Cautery	4.50	
Canal Drier Needles, Fine	1.50	
Canal Drier Needles, Medium	1.50	
Canal Drier Needles, Coarse	1.50	
Wax Spatula	3.25	
Insulators, wall (Strain, for Trolley System), with Turnbuckle	4.50	
Insulator 2 foot H. T. for Connecting Rooms	1.00	
Insulator 2 foot H. T. for Connecting Rooms	60.00	



## ALPHABETICAL LIST

Intensifying Screens (Single).		
5 x 7	\$10.00	
8 x 10	20.00	
10 x 12	30.00	
11 x 14	40.00	
14 x 17	60.00	
Intensifying Screens (Double), Combination, for use with Dupli-Tized Films.		
5 x 7 (The pair).	15.00	
8 x 10 "	32.50	
10 x 12 "	50.00	
11 x 14 "	65.00	
14 x 17 "	100.00	
(For Cassette prices, see Catalog Numbers 1053 to 1057, inclusive.)		
Intensifying Screens (Single), with Cassettes		
5 x 7	22.00	
8 x 10	35.00	
10 x 12	48.00	
11 x 14	62.00	
14 x 17	84.00	
Interval Timer	8.00	
Lead Foil. For Protection in X-ray Treatment, per lb.	.50	
Lead Protective Rubber Apron	1.00	
Lead Protective Gloves (plain)	12.00	
Lead Protective Gloves (gauntlet)	15.00	
Lead Protective Screen, Hinged to Cabinet of SureX Transformer	90.00	
Lead Protective Screen, separate		
Manual, U. S. Army	4.00	
Milameter for SureX, 8-inch diameter, 0-15—0-150M/A	60.00	
Milameter with Bracket, for H. F. current	35.00	
Morse Sine Wave Generator	300.00	
Morse Moist Electrodes (set)	10.00	
Mortar and Pestle	1.00	
Mounts for Dental Films, Cardboard, double film per 100	5.00	
Mounts for Dental Films, Cardboard, single film per 100	4.50	
Nebulizer	3.00	
Negative preservers, see Plate Containers		
Overhead Trolley System. (See Aerial System.)		
Ozone Generator		
Pastilles, Sabouraud, 25 cents each		
Penetrometer (Benoist)		
Photographic Supplies. (See Dark Room Supplies.)		
Pilot Lamp Bulb	4.00	
Plates, 5 x 7	20.00	
Seed X-ray plates, with envelopes, per dozen	1.75	
6 1/2 x 8 1/2 Seed X-ray plates, with envelopes, per dozen	2.50	
8 x 10 Seed X-ray plates, with envelopes, per dozen	3.60	
10 x 12 Seed X-ray plates, with envelopes, per dozen	6.10	
11 x 14 Seed X-ray plates, with envelopes, per dozen	8.50	
14 x 17 Seed X-ray plates, with envelopes, per dozen	13.50	
5 x 7 Seed X-ray plates, without envelopes, per dozen	1.40	
6 1/2 x 8 1/2 Seed X-ray plates, without envelopes, per dozen	2.10	
8 x 10 Seed X-ray plates, without envelopes, per dozen	3.00	
10 x 12 Seed X-ray plates, without envelopes, per dozen	5.10	
11 x 14 Seed X-ray plates, without envelopes, per dozen	7.20	
14 x 17 Seed X-ray plates, without envelopes, per dozen	11.20	
Plate Containers. (Negative Preservers) for Filing		
5 x 7 per 100	.35	
6 1/2 x 8 1/2 per 100	.60	
8 x 10 per 100	1.30	
10 x 12 per 100	1.80	
11 x 14 per 100	2.20	



### ALPHABETICAL LIST

Plate Box, lead lined .....	\$45.00
Plate Changing Tunnel, 10 x 10 .....	14.50
Plate Changing Tunnel, 12 x 12 .....	19.50
Plate Changing Tunnel, 14 x 14 .....	24.00
Plate Changing Tunnel, 17 x 17 .....	30.00
Plate Marker .....	6.00
Powder Blower .....	3.00
Protective Screen, hinged to cabinet of SureX Transformer .....	90.00
Protective Screen, separate .....	90.00
Pump, compressed air and vacuum .....	150.00
Radiometer, Hampson .....	18.00
Reels	
6 feet Cord Reel .....	3.00
9 feet Cord Reel .....	4.00
9 feet Cord Reel, with Wheels .....	6.00
Coolidge Tube Reel .....	8.00
Coolidge Tube Reel, with Wheels .....	10.00
Rebuild X-ray Tube, 5", 6" or 7" .....	35.00
Re-exhaust X-ray Tubes, 5", 6" or 7" .....	10.00
Rubber Apron, Lead Protective .....	15.00
Ruby Lamp and Illuminator, CAMPBELL combination, for up to 8 x 10 plates .....	12.00
Sabouraud Pastilles, each .....	.25
Scales (see Dark Room Supplies).	
Screens, Fluoroscopic (see Fluoroscopic screens).	
Screens, Intensifying (see Intensifying screens).	
Spark Gap Tips, for E Coil (each) .....	2.00
Shut-off for bottles .....	2.50
Sinus Head Block .....	6.00
Stands. (See Tube-stands.)	
Stereoscope, with Nitrogen Lamps and Dimmers .....	175.00
"SureX" Interrupterless Transformer	
No. 12 A. C., 220V., 60 Cycle (or 110 Volt, if ordered) Switchboard attached .....	1650.00
No. 12 D. C., 220V., (or 110 Volt, if ordered) Switchboard attached. (Army Type) .....	1950.00
No. 2 A. C., 220 V., 60 Cycle, Switchboard attached .....	1550.00
Separate Control Table instead of Switchboard attached, difference extra .....	200.00
Switch, High Tension Aerial .....	40.00
Switchboard Instruments. (See Instruments.)	
Tables—"Clinix"—Self-Excited—Tube Tilt—Motor Driven—Auto Control.	
Clinix Tube-tilt Table without Stand, with 11 x 14 Screen, Automatic Screen Attachment, Motor Drive, Auto Control .....	2200.00
Clinix Tube-tilt Table, No. 6 Tube-stand, 11 x 14 Fluoroscope Screen, Automatic Screen Attachment, Motor Drive, Auto Control, complete .....	2500.00
Clinix Tube Tilt Table without Stand, High Tension Transformer or Control, with 11 x 14 Screen .....	1650.00
Clinix Tube Tilt Table without Stand, Motor, High Tension Transformer or Control, with 11 x 14 Screen .....	1550.00
Clinix Tube Stand Transformer, for No. 6 Tube Stand .....	450.00
Tanks, see Dark Room Supplies.	
Thermometer Stirring Rod .....	1.00
Time Controller .....	60.00

### ALPHABETICAL LIST

1010	Time Controller, with switch mounted on separate panel .....	\$75.00
2081	Time Controller for Coolidge Bedside Unit Cabinet Type .....	60.00
2082	Time Controller for Coolidge Bedside Unit Portable Type .....	60.00
2083	Time Controller for Coolidge Dental Unit .....	60.00
2093	Transformer, Extra High Tension, for No. 6 Tube Stand, with Clinix .....	450.00
Transformers—Coolidge, see Coolidge Transformers and Units.		
Transformers—Interrupterless, see SureX Transformers.		
Trays, 8 x 10 .....	1.50	
1128	Trays, 8 x 10 .....	3.00
1129	Trays, 10 x 12 .....	3.00
1130	Trays, 11 x 14 .....	4.00
1131	Trays, 14 x 17 .....	6.00
1007	Treatment Chair (Auto-Condensation), with Leg Section (Head Section \$15 extra) .....	85.00
Trolley System, see Aerial System.		
1076	Trolley Wheels .....	3.00
1071	Trolley Reels, with Wheels, 9 feet .....	6.00
1070	Trolley Wire, per foot .....	.05
Tubes		
1022	Tube, Coolidge, fine focus, 7" .....	125.00
1023	Tube, Coolidge, medium focus, 7" .....	125.00
1024	Tube, Coolidge, broad focus 7" .....	125.00
1029	Tube, Coolidge Dental, Radiator Type .....	125.00
1270	Tube, Coolidge Bedside, Radiator Type (Indicate whether 10 or 30 M/A) .....	125.00
1027	Tube, 6" tungsten Target (High-Frequency) .....	45.00
1028	Tube, 7" Heavy tungsten Target (Transformer) .....	50.00
Tube, Re-build, using old tungsten Target 5", 6" or 7" .....	35.00	
Tube, Re-exhaust 5", 6" or 7" .....	10.00	
Tube-rack		
1084	Tube-rack, 1 Unit .....	3.50
1085	2 Unit .....	5.00
1086	4 Unit .....	7.50
1087	6 Unit .....	10.50
2011	Tube-shield, leaded rubber 5" .....	15.00
1523	Tube-shield, leaded rubber 6" .....	15.00
2010	Tube-shield, for Coolidge Dental Tube, Lead Glass .....	35.00
1260	Tube-shield, for Coolidge Bedside Tube, Lead Glass .....	25.00
Tube-stands		
1517	Wood, portable .....	6.00
1516	Wood, Floor Stand .....	15.00
2007	Coolidge Dental Tube Holder (Bracket Type) (Regular) .....	60.00
2106	Coolidge Dental Tube Holder, Dental Engine Type, Long Range .....	110.00
2071	Coolidge Dental Tube Holder, Bracket Type (Stereoscopic) .....	95.00
1594	Coolidge Bedside Portable Tube Holder (Bracket Type) (Regular) .....	60.00
2072	Coolidge Bedside Portable Tube Holder (Bracket Type) (Stereoscopic) .....	95.00
1591	Coolidge Bedside, Counterweighted, Stereoscopic .....	190.00
1515	No. 12 Tube Stand .....	180.00
1068	No. 6 Stereoscopic Tube Stand with Diaphragm .....	300.00
1013	(Centering Rod, Catalog No. 2097, \$7.50—See price list CONES).	
Units. (See Coolidge Units.)		
1579	Vacuum Cups, small .....	1.50
1580	Vacuum Cups, medium .....	1.50
1581	Vacuum Cups, large .....	1.50
1035	View Box (Plate Illuminator), Size 17" x 17" with Nitrogen Lamps and Dimmer .....	60.00
1068	Wall Board .....	3.00
1067	Wall Insulator (Strain) without Turnbuckle .....	4.00
1132	Wash Box to hold 14 x 17 Plates .....	12.00
1070	Wire for Trolley System, per ft. .....	.05
2098	X-ray Dose Indicator, Grover's .....	3.00



### ALPHABETICAL LIST

### ALPHABETICAL LIST

	Intensifying Screens (Single).	
1048	5 x 7 .....	\$10.00
1049	8 x 10 .....	20.00
1050	10 x 12 .....	30.00
1051	11 x 14 .....	40.00
1052	14 x 17 .....	60.00

### ALPHABETICAL LIST



### ALPHABETICAL LIST

**Insulated and Miscellaneous Electrodes**

Insulated Vaginal	2.50
Insulated Rectal	2.00
Insulated Nasal	2.00
Insulated Throat	2.00
Insulated Ear	2.00
Gouitre Electrode	2.50
Single Eye Electrode	1.50
Double Eye Electrode	2.50
Cataphoric Electrode	4.50



**NUMERICAL PRICE LIST**

September 1, 1920

	Price
<b>"SureX" Interrupterless Transformer</b>	
No. 12 A. C., 220V, 60 Cycle (or 110V, if ordered) Switchboard attached	\$1650.00
No. 12 D. C., 220 V (or 110V, if ordered) Switchboard attached	1950.00
No. 2 A. C. (Army Type) Switchboard attached	1550.00
Separate Control Table for No. 12 SureX, instead of Switchboard attached	200.00
Difference Extra	
Rubber, X-ray Protective, per sq. ft.	3.00
Auto Condensator Chair (with Leg Section) (Head Section \$15 extra)	85.00
Milammeter for SureX, 8-inch diameter, 0-15-0-50 M/A.	60.00
Time Controller	60.00
Time Controller, with switch mounted on separate panel	75.00
Protective Screen, separate	90.00
Protective Screen, hinged to cabinet of SureX Transformer	90.00
No. 6 Stereoscopic Tube-stand, with diaphragm	300.00
(Centering Rod, Catalog No. 2097, \$7.50—see price list CONES)	
Cones	
No. 6A	14.00
No. 6B	17.00
No. 6C	14.00
No. 6D	14.00
No. 5A	14.00
No. 5B	17.00
Coilidge Tubes	
Fine Focus, 7"	125.00
Medium Focus, 7"	125.00
Broad Focus, 7"	125.00
Coilidge Tube Filament Transformer, with Control, A. C. (specify voltage)	
Tube, 6" Tungsten Target (High-Frequency)	45.00
Tube, 7" Heavy Tungsten Target (Transformer)	50.00
Dental Tube, Radiator Type	125.00
Stereoscope with Nitrogen Lamps and Dimmers	175.00
Illuminator, Negative (with Nitrogen Lamps and Dimmers)	60.00
Foot Switch, heavy capacity, double contact, to control lamp	45.00
Foot Switch, heavy capacity, single contact, with Cable and Plug	30.00
Fluoroscope	
8x10, not Folding	50.00
Fluoroscope Screens	
8 x 10	35.00
10 x 12	52.00
11 x 14	72.00
14 x 17	102.00
Fluoroscope Screen mounted in Oak Frame, with Lead Glass	
8 x 10	52.00
10 x 12	65.00
11 x 14	95.00
14 x 17	135.00
Fluoroscopy, Vertical, Horizontal, Angular (see Tables).	
Intensifying Screens (Single).	
5 x 7	10.00
8 x 10	20.00
10 x 12	30.00
11 x 14	40.00
14 x 17	60.00

**2015 Dental Electrodes (set with handle)**

Dental Surface Electrode	1.75
2016 Dental Cavity or Pulp Tester	1.75
2017 Dental Pyorrhea	1.75
2018 Dental Cataphoric	1.75
2019 Dental Handle, with Cord	1.75
2020 Instruments, Switchboard (set) with Handle	3.50
2021 Mouth Lamp	4.50
2022 Antrum Lamp	4.50

**NUMERICAL LIST**

	\$
<b>1053 Cassettes 5 x 7 (for Intensifying Screens)</b>	
1054 Cassettes 8 x 10 (for Intensifying Screens)	15.00
1055 Cassettes 10 x 12 (for Intensifying Screens)	18.50
1056 Cassettes 11 x 14 (for Intensifying Screens)	22.00
1057 Cassettes 14 x 17 (for Intensifying Screens)	24.00
1058 Intensifying Screens (Single), with Cassettes 5 x 7	22.00
1059 8 x 10	35.00
1060 10 x 12	48.50
1061 11 x 14	62.00
1062 14 x 17	84.00
1063 Plate Changing Tunnels, 10 x 10	14.50
1064 Plate Changing Tunnels, 12 x 12	19.50
1065 Plate Changing Tunnels, 14 x 14	24.00
1066 Plate Changing Tunnels, 17 x 17	30.00
1067 Individual Parts	
Wall Insulator (Strain) without Turnbuckle	4.00
1068 Wall Board	3.00
1069 Wall Insulator (Strain, for Trolley System) with Turnbuckle	4.50
1070 Trolley Wire, per foot	0.05
1071 Trolley Cord Reel, with Wheels	6.00
1072 Trolley Wheel	3.00
1073 Coolidge Tube Reel, with Trolley Wheels	10.00
1074 2 foot H. T. Insulator Tubes for Connecting Rooms	7.50
1075 Aerial H. T. Switch, complete	40.00
1076 Aerial System (standard)	
Consisting of 2 Wall Boards, 3 Wall Insulators, without Turnbuckles, 3 Wall Insulators, without Turnbuckles, 80 feet Trolley Wire, 1 Trolley Reel, 1 mm.	
1077 1078 Filters, aluminum	
1079 1 mm.	1.00
1080 2 mm.	1.50
1081 3 mm.	2.00
1082 Sinus Head Block	6.00
1083 Plate Box, lead lined	45.00
1084 Tube-rack	
1084 1 Unit	3.50
1085 2 Unit	5.00
1086 4 Unit	7.50
1087 6 Unit	10.50
1088 Plate Marker	6.00
1089 Radiometer, Hampson	18.00
1090 Apron, X-ray Protective	15.00
1091 Gloves, opaque protective (plain)	12.00
1092 Gloves, opaque protective (gauntlet)	12.00
Plates, X-ray	
1093 5 x 7 Seed X-ray Plates, with envelopes, per dozen	1.70
1094 6 $\frac{1}{2}$ x 8 $\frac{1}{2}$ Seed X-ray Plates, with envelopes, per dozen	2.55
1095 8 x 10 Seed X-ray Plates, with envelopes, per dozen	3.60
1096 10 x 12 Seed X-ray Plates, with envelopes, per dozen	6.10
1097 11 x 14 Seed X-ray Plates, with envelopes, per dozen	8.50
1098 14 x 17 Seed X-ray Plates, with envelopes, per dozen	13.50
1099 5 x 7 Seed X-ray Plates, without envelopes, per dozen	1.40
1100 6 $\frac{1}{2}$ x 8 $\frac{1}{2}$ Seed X-ray Plates, without envelopes, per dozen	2.10
1101 8 x 10 Seed X-ray Plates, without envelopes, per dozen	3.00
1102 10 x 12 Seed X-ray Plates, without envelopes, per dozen	5.15
1103 11 x 14 Seed X-ray Plates, without envelopes, per dozen	7.25
1104 14 x 17 Seed X-ray Plates, without envelopes, per dozen	11.25
Films, Dental	
1105 $\frac{1}{2}$ x $1\frac{1}{8}$ , per dozen	.50
1106 $1\frac{1}{2}$ x $2\frac{1}{2}$ , per dozen	.85
1107 $2\frac{1}{4}$ x 3 $\frac{1}{2}$ , per dozen	1.75
1108 Film Mounts, cardboard, per hundred	4.50
1109 Film Mounts, transparent, per hundred	5.50



## NUMERICAL LIST

Dark Room Supplies	
Developing Tank, stone	\$ 75.00
Developing Tank, plate racks, each, 5 x 7	2.00
Developing Tank, plate racks, each, 6½ x 8½	2.00
Developing Tank, plate racks, each, 8 x 10	2.00
Developing Tank, plate racks, each, 10 x 12	2.00
Developing Tank, plate racks, each, 11 x 14	2.50
Developing Tank, plate racks, each, 14 x 17	2.50
Developer, Eastman X-ray, ½ dozen packages (each package makes 12 oz.)	.90
Fixing Powder (makes 64 oz.)	.25
Hard Rubber Fixing Box	.50
Graduate, 8 ounces	.55
Graduate, 16 ounces	.75
Drying Rack	3.00
Mortar and Pestle	3.00
Ruby Lamp and Illuminator, CAMPBELL combination. For up to 8 x 10 Plates	12.00
Balance Scales	5.00
Thermometer Stirring Rod	1.00
Trays, 8 x 10	1.50
Trays, 10 x 12	3.00
Trays, 11 x 14	4.00
Trays, 14 x 17	6.00
Wash Box to hold 14 x 17 Plates	12.00
Sabouraud Pastilles, each	.25
Film Clamps. For developing, per dozen.	2.50
Film Holders. For dental radiography, each	.75
Army (U. S.) Manual	4.00
Dental Coil (Coolidge Dental Unit), A. C., 50 to 60 Cycle, Mahogany finish	600.00
Bedside Tube-shield, Lead Glass	25.00
Coolidge Radiator Bedside Tube	125.00
Model "T" High Frequency Coil, A. C., 50 to 60 Cycle	500.00
Model "T" High Frequency Coil with Pump, A. C., 50 to 60 Cycle	650.00
Model "E", High Frequency Coil, A. C., 50 to 60 Cycle	300.00
Model "H", High Frequency Coil, A. C., 50 to 60 Cycle	150.00
Cabinet for Model "E" Coil or Portable Coolidge Unit	1579
No. 12 Tube-stand	180.00
Wood Floor Stand	15.00
Wood, portable	6.00
No. 12A	10.00
No. 12B	10.00
Fluoroscope	35.00
5 x 7, Folding	15.00
Tube-shield, leaded rubber 6"	150.00
Pump, compressed air and vacuum	20.00
Auto Condensation Pad, with Cords	35.00
Miliammeter with Bracket, for H. F. current	
Electrodes	
Plain Electrodes (set)	10.00
Surface Electrodes	1.50
Vaginal Electrodes	1.50
Rectal Electrodes	1.50
Urethral Electrodes	1.50
Nasal Electrodes	1.50
Throat Electrodes	2.00
Electrode Handle	
Insulated and Miscellaneous Electrodes	
Insulated Vaginal	2.50
Insulated Rectal	2.00
Insulated Urethral	2.00
Insulated Nasal	2.00
Insulated Throat	2.00
Insulated Ear	2.00
Goftre Electrode	2.50
Single Eye Electrode	1.50
Double Eye Electrode	2.50
Cataphoric Electrode	5.00

## NUMERICAL LIST

1548	Condenser (Localizing Surface) Electrode	\$ 5.00
1549	Block Tin Electrode, 5" x 7"	1.00
2107	Block Tin Electrode, 8" x 10"	1.50
1550	Treatment Chair, Vacuum Electrode, each	1.00
1551	Treatment Chair, Hand Electrode, each	1.50
1552	Fulguration Electrode Handle, with 2 Electrodes (Extra Electrode 25 cents)	4.50
1553	Moist Electrode, large	3.50
1554	Moist Electrode, small	3.00
1555	Metal Hand Electrode (pair)	.75
1556	Ozone Generator	20.00
1560	Rotary Converter, with step-up transformer, 6 ampere	150.00
1561	Rotary Converter, without step-up transformer, 6 ampere	100.00
1562	Rotary Converter, with step-up transformer, 12 ampere	200.00
1563	Rotary Converter, without step-up transformer, 12 ampere	150.00
1564	Morse Sine Wave Generator	300.00
1565	Morse Moist Pads (set)	10.00

## Cords

1567	Connecting Cord, with Plugs	3.00
1568	Heavy Cable, with Hook	2.00
1569	Light Cable, with Hook	1.50
1570	Cautery Cords (pair)	1.50
1571	Bifurcated Cord	1.50
1572	Treatment Chair Cord	1.50
1573	Sabouraud Treatment Chair and Blade	6.50
1574	Cautery, Blade only	2.00
1575	Diagnostic Lamp in holder	2.50
1576	Coolidge Diagnostic Lamp Bulb	.50

## Miscellaneous Parts

1577	Small Spark Gap Tips for Model E Coil (each)	2.00
1578	Rotating Spark Gap Plate	10.00
1579	Vacuum Cups, small	1.50
1580	Vacuum Cups, medium	1.50
1581	Vacuum Cups, large	1.50
1582	Nebulizer	3.00
1583	Atomizer	3.50
1584	Powder Blower	3.00
1585	Shut-off for bottles	2.50
1586	Eustachian Tube inflator	.50
1587	Pilot Lamp Bulb	.50
1591	Coolidge Beadsie Stereoscopic, Counterweighted, Tube-Stand	190.00
1592	Coolidge Beadsie Coil, Portable Type, 0 to 30 Milliamperes, 3" to 5" Spark Gap, Rheostat Control, (Single Unit,) A. C.	540.00
1593	Coolidge Bedside Portable, Separate Auto Transformer Control, for use with No. 1592 as Double Unit.	100.00
1594	Coolidge Beadsie Portable Tube Holder, Adjustable Bracket Type (Regular)	60.00
2007	Coolidge Dental Tube Holder, Adjustable Bracket Type (Regular)	60.00
2010	Coolidge Dental Tube Holder, Adjustable Bracket Type (Regular)	35.00
2011	Coolidge Dental Tube-shield, Lead Glass	35.00
2012	Tube-shield leaded rubber 5"	7.00
	Angle Indicator	

## Electrodes (Glass vacuum).

2015	Dental Electrodes (set with handle)	12.00
2016	Dental Surface Electrode	1.75
2017	Dental Cavity or Pulp Tester	1.75
2018	Dental Gum	1.75
2019	Dental Pyorrhcea	1.75
2020	Dental Cataphoric	1.75
2021	Dental Handle, with Cord	3.50
2022	Instruments, Switchboard (set) with Handle	35.00
2023	Mouth Lamp	4.50
2024	Antrum Lamp	4.50



## NUMERICAL LIST

**NUMERICAL LIST**

2025	Root Canal Drier . . . . .	\$ 4.50
2026	Gutta-Percha Excavator . . . . .	4.50
2027	Cautery . . . . .	4.50
2028	Canal Drier Needles, Fine . . . . .	1.50
2029	Canal Drier Needles, Medium . . . . .	1.50
2030	Canal Drier Needles, Coarse . . . . .	1.50
2031	Wax Spatula . . . . .	3.25
2043	Film Chest, Dental Lead . . . . .	12.00
2044	Film Illuminator, Dental . . . . .	7.50
2045	Ammeter, For Coolidge Filament Transformer . . . . .	30.00
2046	Developing Cabinet (Portable Dark Room) . . . . .	45.00
2047	Developing Cabinet, with Trays, Films and Chemicals . . . . .	50.00
2060	Foil, Lead, for X-ray Protection in Treatment, per lb. . . . .	.50
2061	Lead Glass Protective, Regular Plate Sizes, per sq. inch . . . . .	.05
2062	Interval Timer . . . . .	8.00
2063	Benoist Penetrometer . . . . .	4.00
2064	Films, Eastman Dupli-Tized, Size 5" x 7" with envelopes, per dozen . . . . .	1.25
2065	Films, Eastman Dupli-Tized, Size 6½" x 8½" with envelopes, per dozen . . . . .	2.00
2066	Films, Eastman Dupli-Tized, Size 8" x 10" with envelopes, per dozen . . . . .	2.85
2067	Films, Eastman Dupli-Tized, Size 10" x 12" with envelopes, per dozen . . . . .	4.50
2068	Films, Eastman Dupli-Tized, Size 11" x 14" with envelopes, per dozen . . . . .	5.55
2069	Films, Eastman Dupli-Tized, Size 14" x 17" with envelopes, per dozen . . . . .	8.75
2071	Coolidge Dental Tube Holder, Bracket Type, (Stereoscopic) . . . . .	95.00
2072	Coolidge Bedside Tube Holder, Bracket Type, (Stereoscopic) . . . . .	95.00
2081	Automatic Time Controller for Coolidge Bedside Unit (Cabinet Type) . . . . .	60.00
2082	Automatic Time Controller for Coolidge Bedside (Portable Type) . . . . .	60.00
2083	Automatic Time Controller for Coolidge Dental Unit . . . . .	60.00
2084	Campbell Coolidge Clinical Unit Coil, Metal Cabinet, 3, 4 and 5" gap, 0 to 30 m/a, A.C. . . . .	680.00
2085	Developing frame for Eastman Dupli-Tized Films . . . . .	1.50
2086	Clinix—Self-Excited—Tube-Tilt Table, Motor Driven, with Screen, no Stand . . . . .	2200.00
2087	Clinix—Self-Excited—Tube-Tilt Table, Motor Driven, with Screen and No. 6 Stand . . . . .	2500.00
2088	Intensifying Screen (Double), Combination for use with Dupli-Tized Films, 5 x 7 . . . . .	15.00
2089	Intensifying Screen (Double), Combination for use with Dupli-Tized Films, 8 x 10 . . . . .	32.50
2090	Intensifying Screen (Double), Combination for use with Dupli-Tized Films, 10 x 12 . . . . .	50.00
2091	Intensifying Screen (Double), Combination for use with Dupli-Tized Films, 11 x 14 . . . . .	65.00
2092	Intensifying Screen (Double), Combination for use with Dupli-Tized Films, 14 x 17 . . . . .	100.00
2093	(For Cassette prices, see Catalog Numbers 1053 to 1057, inclusive.)	
2094	Extra High Tension Transformer, for No. 6 Stand, Sold only for Clinix . . . . .	450.00
2095	Clinix Table without Stand, Transformer or Control, with Screen and Motor . . . . .	1650.00
2096	Clinix Table without Stand, Motor, Transformer or Control, with Screen . . . . .	1550.00
2097	Blackman Hand Electrode . . . . .	5.00
2098	Centering Rod for No. 6 Tube Stand . . . . .	7.50
2099	Grover's X-ray Dose Indicator . . . . .	3.00
2100	Dental Coil, A. C., 50 to 60 CY, Metal Cabinet, Mahogany Finish . . . . .	600.00
2101	Exposure Holders for Dupli-Tized Film 5 x 7, ea. . . . .	.15
2102	Exposure Holders for Dupli-Tized Film 6½ x 8½ . . . . .	.20
2103	Exposure Holders for Dupli-Tized Film 8 x 10 . . . . .	.25
2104	Exposure Holders for Dupli-Tized Film 10 x 12 . . . . .	.25
2105	Exposure Holders for Dupli-Tized Film 11 x 14 . . . . .	.35
2106	Dental Tube Holder, Engine Type, Long range, Automatic . . . . .	110.00
2107	Block Tin Electrode, 8" x 10" . . . . .	1.50
2108	.....	
2109	.....	
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**NUMERICAL LIST**

2111	.....	
2112	.....	
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2025	Root Canal Drier
2026	Gutta-Percha Excavator
2027	Cautery
2028	Canal Drier Needles, Fine
2029	Canal Drier Needles, Medium
2030	Canal Drier Needles, Coarse
2031	Wax Spatula

Dental Lead

#### NUMERICAL LIST

\$ 4.50

4.50

4.50

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12.00

#### NUMERICAL LIST



# X-RAY APPARATUS

## Medal of Honor



## THE HIGHEST AWARD

PANAMA-PACIFIC INTERNATIONAL EXPOSITION  
SAN FRANCISCO, CALIFORNIA, 1915



## PANAMA-PACIFIC INTERNATIONAL EXPOSITION 1915

ADMINISTRATION BUILDING

INTERNATIONAL  
AWARD SYSTEM

SAN FRANCISCO,  
CALIFORNIA.

Campbell Electric Company,  
Lynn, Massachusetts.

Attention: Mr. Fred R. Campbell.

Gentlemen:

Replying to your favor of December 21st, I beg to advise you that the medals and diplomas for exhibits in the Department of Liberal Arts, in which you are classified, will hardly be ready for distribution before March 1st. As soon as prepared they will be sent directly to you.

It is impossible at this time to supply you with a list of other awards made for X-ray and High-Frequency apparatus, but I desire to repeat my former statement, that the award of Medal of Honor made to you is the highest award made in this line.

In conclusion, permit me to thank you for your expressions of satisfaction as to the management of the Exposition and good wishes for its various officials, and to say that I shall be pleased to call the attention of President Charles C. Moore to the sentiments contained in your letter.

Very truly yours,

*O. H. Fernbach*

Secretary of the International  
Award System.

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SAN FRANCISCO,  
CALIFORNIA.

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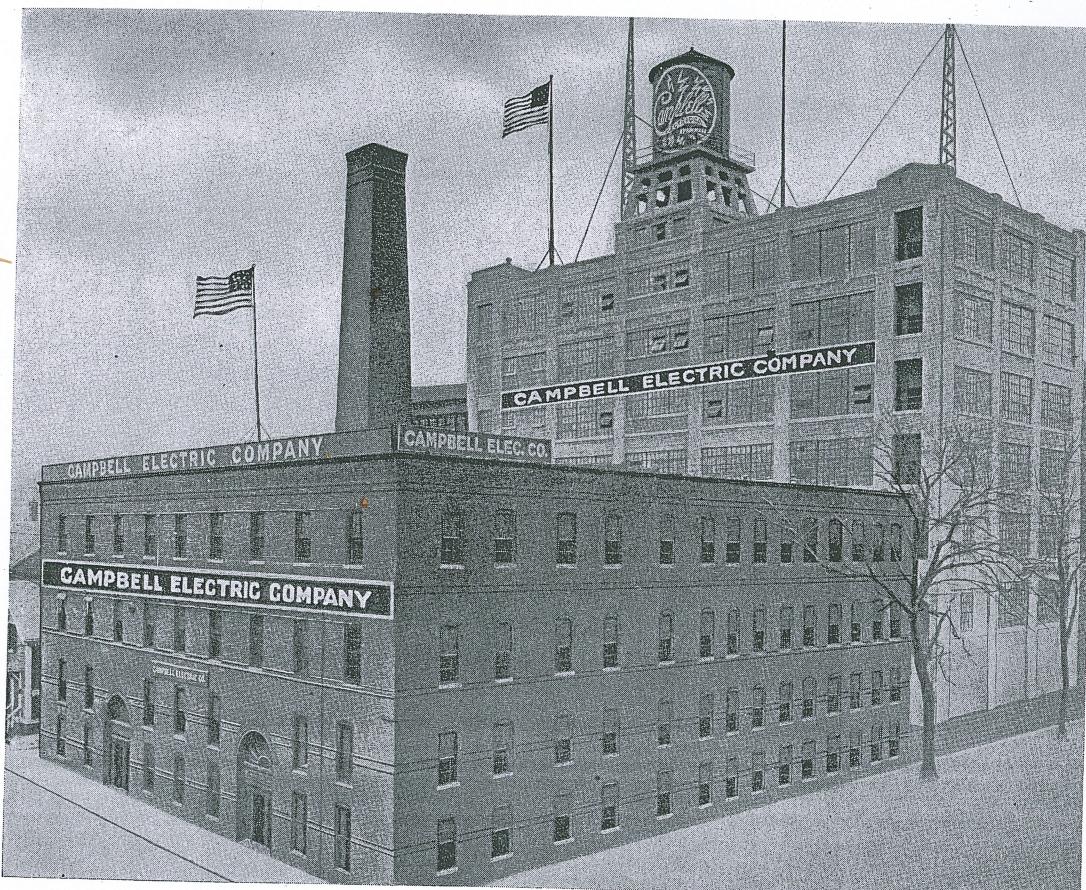
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Campbell Electric Company Factory  
Lynn, Mass.



The Campbell Electric Company Factory at Lynn, Massachusetts, is conceded to be the largest plant in the world devoted to the manufacture of X-ray and High Frequency apparatus.

It is designed and constructed with especial reference to efficiency in the manufacture of X-ray and other electrical apparatus, and is as permanent and well-known in the city as its products are permanent and well known throughout the world.

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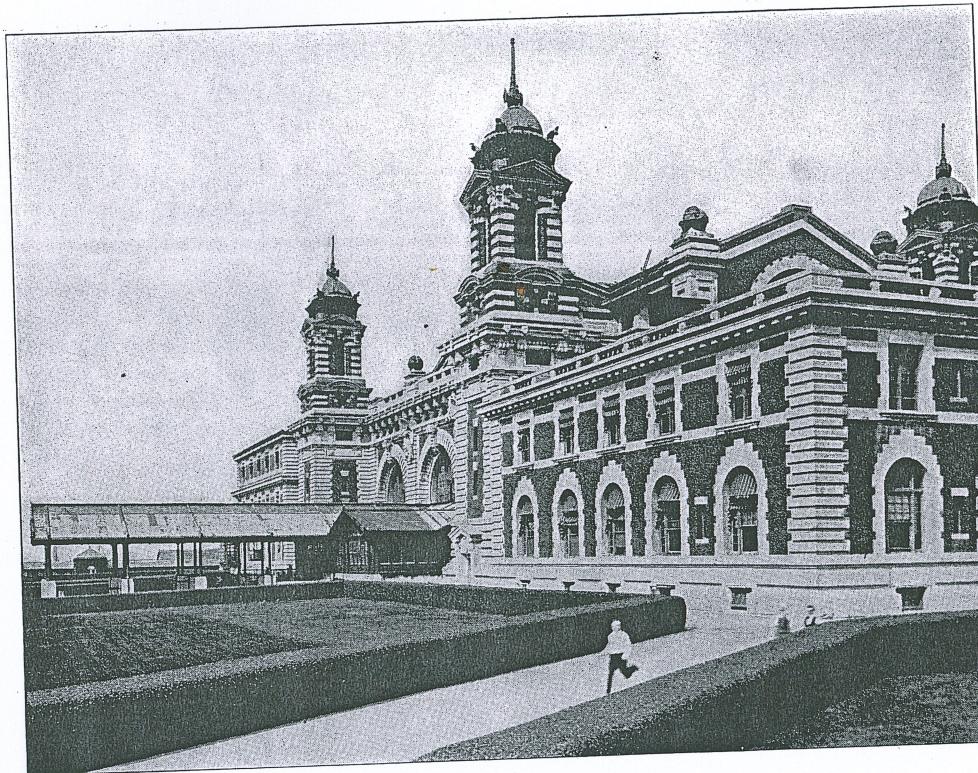
*Campbell*

# *Campbell* *redentials*

A FEW OF THEM WILL BE FOUND ON  
THE PAGES IMMEDIATELY FOLLOWING.

*Campbell*  
ELECTRIC CO.  
LYNN, MASS.

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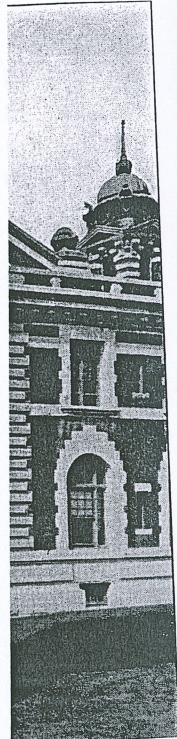
Copyright, Underwood & Underwood, New York, N. Y.

**U. S. Army Debarkation Hospital, Ellis Island, New York**

Equipped with Campbell *Surex* Transformer



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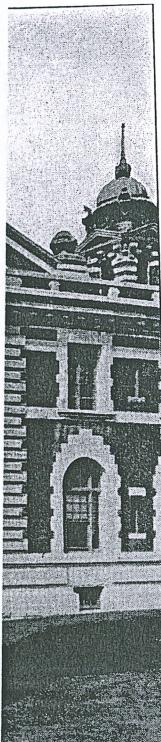
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"The  
Wreden,  
of  
manent rep  
of Austria;



The International Red Cross Conference is held only once in five years, and in different nations. In May, 1912, the Conference was held in America, at Washington, D. C. At this Conference the most prominent makes of X-ray apparatus of various nations competed for an award. The only manufacturers of America to receive an award was the Campbell Electric Company, of Lynn, Mass. The jury making the awards was a most impartial one, not an English-speaking nation being represented thereon.



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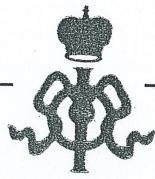
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### Fonds International de la Croix-Rouge

### "IMPÉRATRICE MARIE FÉODOROVNA"



Conformément aux Statuts du Fonds International institué par SA MAJESTÉ L'IMPÉRATRICE MARIE FÉODOROVNA pour des prix à décerner aux auteurs des meilleures inventions ayant pour but d'atténuer les souffrances des militaires blessés et malades, le Jury International dûment constitué et convoqué à Washington en 1912 pour adjuger les prix du Fonds susindiqué a décerné un Diplôme de mention honorable

à la maison CAMPBELL ELECTRIC COMPANY (Etats-Unis)

pour un appareil radiographique, exposé à la Neuvième Conférence Internationale de la Croix-Rouge à Washington (1912).

En foi de quoi le présent Diplôme est délivré au titulaire par le Comité Central de la Société Russe de la Croix-Rouge avec apposition de son sceau. Saint-Pétersbourg, le 14/27 Novembre 1913.

Le Président du Comité Central de la Société Russe de la Croix-Rouge,  
Maitre de la Cour de S. M. L'EMPEREUR *V. P. Myagin*

Les Membres du Comité Central *Prince N. Galitzine Prince A. Cholokashvili  
K. von Myszkowski Prince V. Vorachidze*

Le Secrétaire du Comité Central *A. Zamanoff*

Va. scellé et enregistré No 45

From the Washington Post, Friday, May 17, 1912

"The awards announced yesterday were determined upon by a jury composed of Professor Wreden, of Russia, permanent chairman; Dr. Ferriere, of the international committee, permanent reporter; Mr. Mosle, of Germany; Lieutenant Colonel Brezzi, of Italy; Dr. Silbermark, of Austria; Senor Riano, of Spain; Dr. Dedet, of France, and Dr. Yenji Inoue of Japan."



At the outbreak of the Mexican trouble, the U. S. Army Base Hospitals along the Mexican border were equipped with Campbell "Sure X" X-ray Transformers.

When Pershing's American Expeditionary Force sailed for France, it was equipped with Campbell "Sure X" X-ray Transformers which the United States Government purchased on the strength of the highly efficient service performed by this apparatus on the Mexican border.

The U. S. Ship "George Washington," the famous Army Transport which carried President Wilson to France, is equipped with a Campbell "Sure X" Transformer.

Many U. S. Naval Hospitals and Transports throughout the world are equipped with Campbell "Sure X" Transformers.

The U. S. Hospital Ship "Solace" is equipped with a Campbell "Sure X" Transformer.

Nearly two hundred Campbell "Sure X" Transformers are in use in U. S. Government Hospitals in the United States and Europe.

The American Red Cross use Campbell "Sure X" Transformers, and selected them for use in the emergency occasioned by the great Halifax disaster.

The Campbell Clinix X-Ray Plant was selected by the U. S. Public Health Service for use in St. Elizabeth's Hospital, of about 3,800 beds, Washington, D. C., after careful comparison with all other types of X-ray apparatus and displaced separate piece equipment.

The Clinix is now being installed by America's most noted Roentgenologists as the last word in radiographic and fluoroscopic apparatus.



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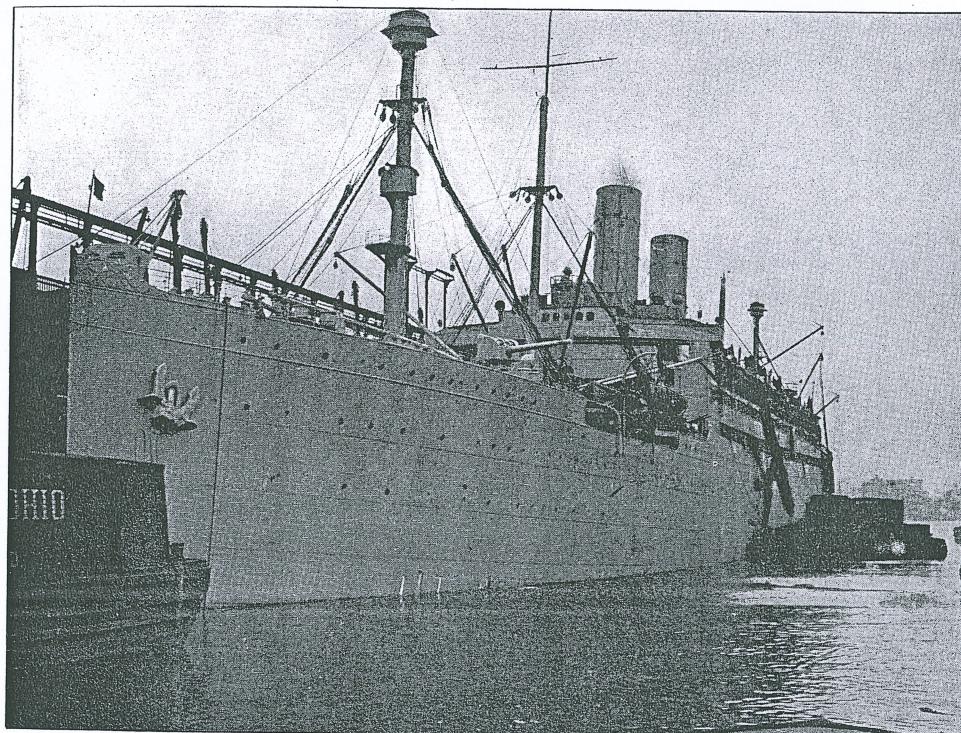
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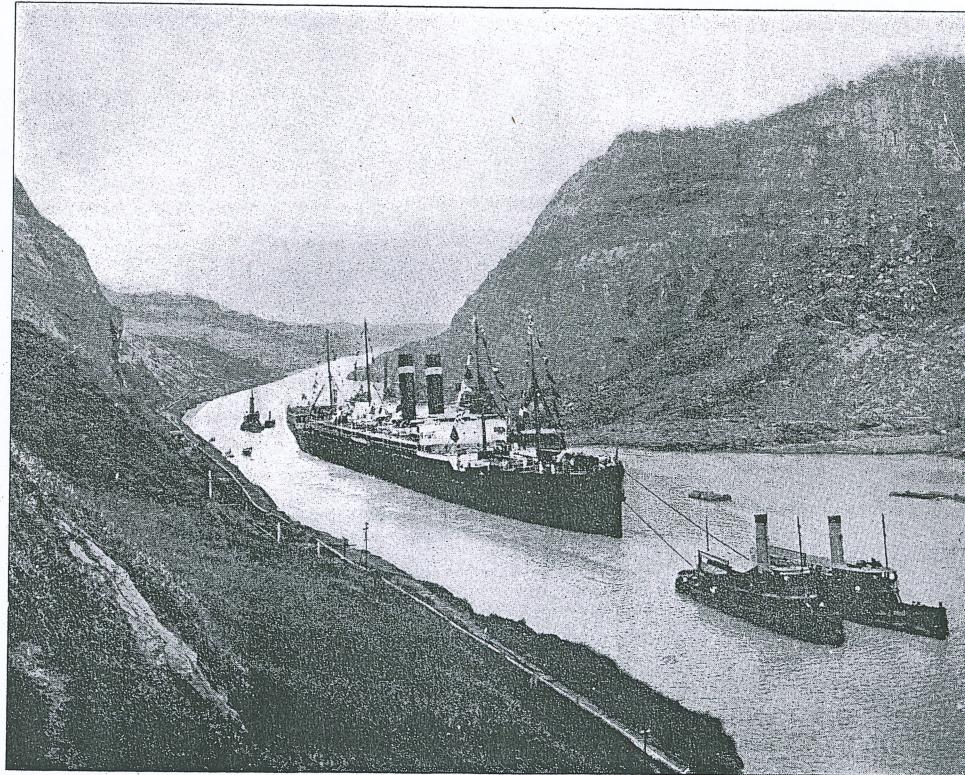


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U. S. S. "George Washington." The President's Peace Ship

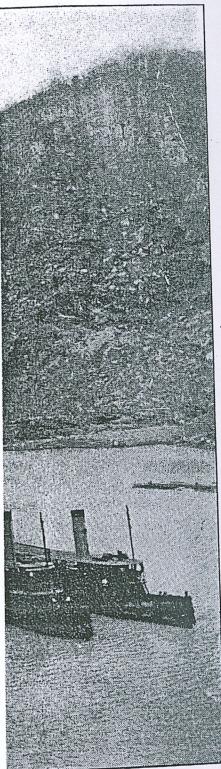
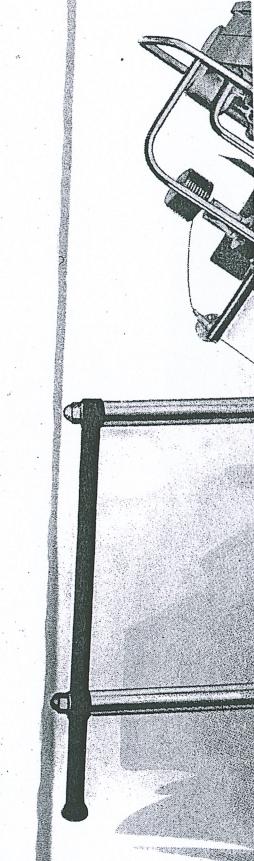
Equipped with a Campbell *SureX* Transformer

*Campbell*  
ELECTRICAL  
Lynn, Mass.



Copyright, Underwood & Underwood, New York, N. Y.

U. S. S. "Kroonland," passing through Culebra Cut, Panama Canal.  
Equipped with a Campbell Coolidge Bedside Unit

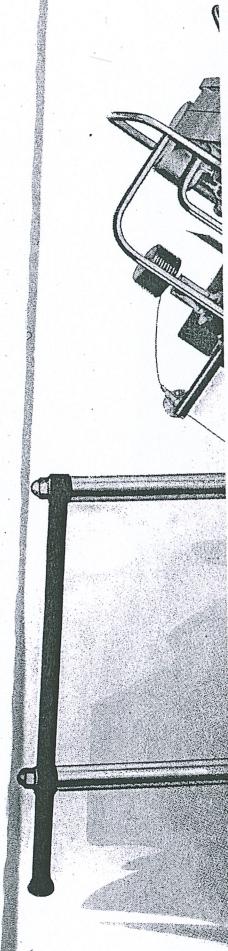


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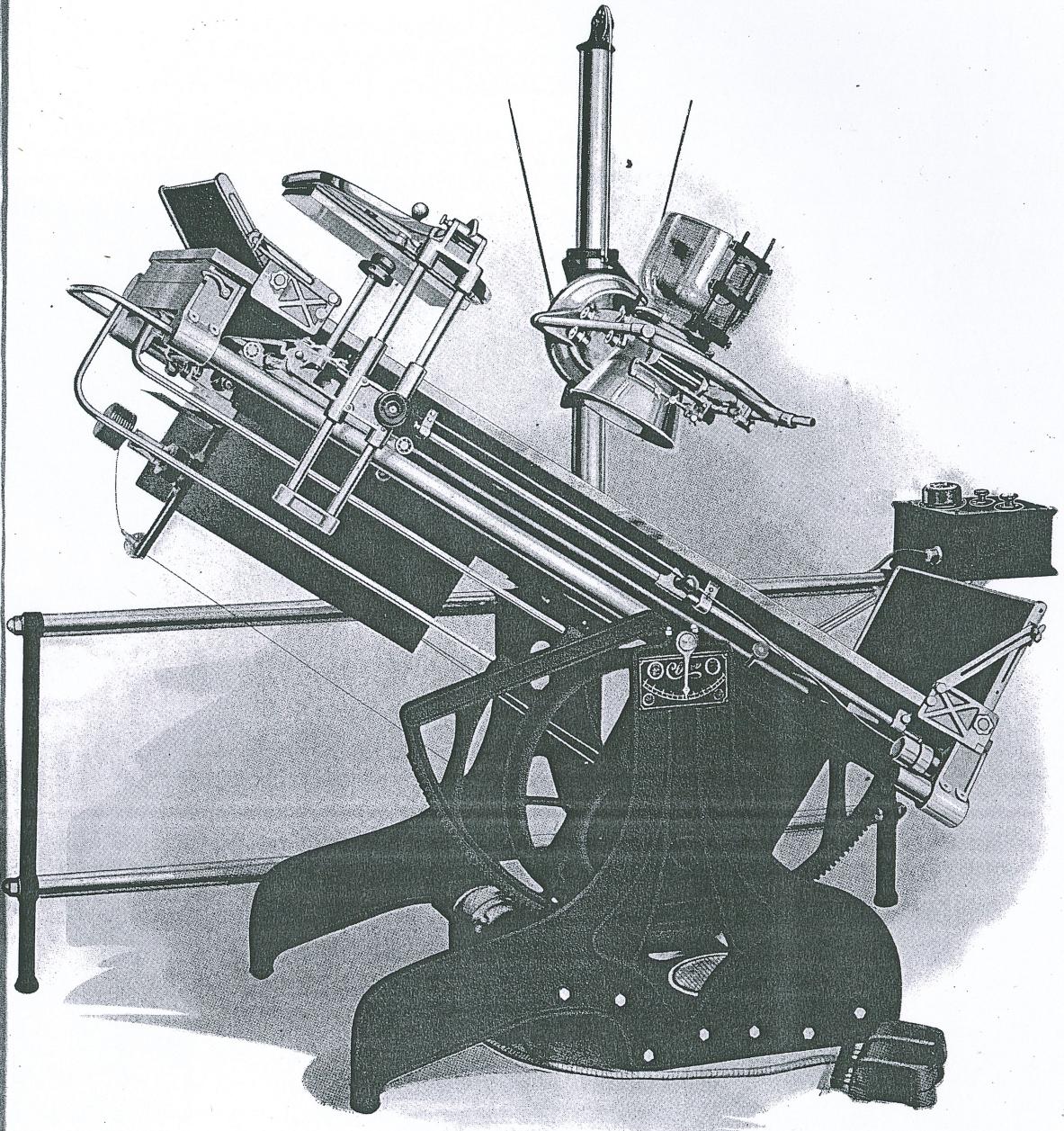


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TRADE MARK  
*Clinix*



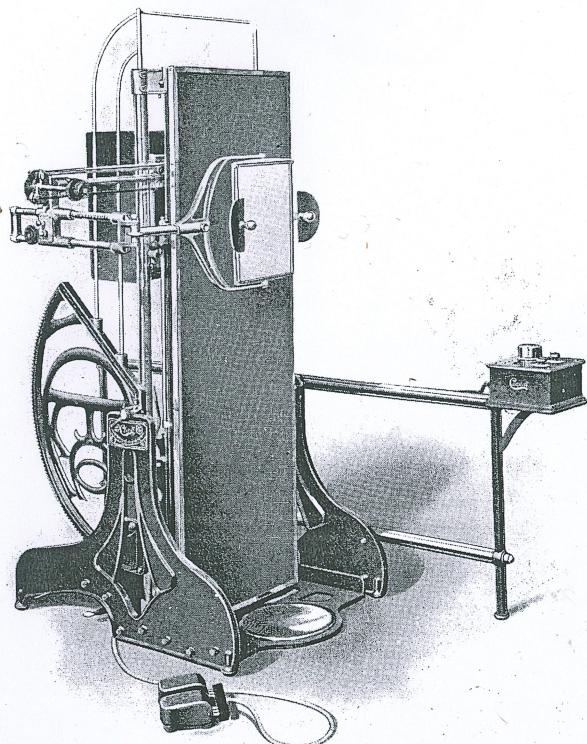
#### Campbell "Clinix" X-ray Plant

Tube Tilt Table, Motor Driven. Transformer attached to under side of table.  
Also furnished with Transformer mounted on top of Tube Stand.  
Both High Tension Transformers operated by the one Auto Transformer Control Case.  
1 to 30 Milliamperes, 2 to 5-inch Spark Gap.

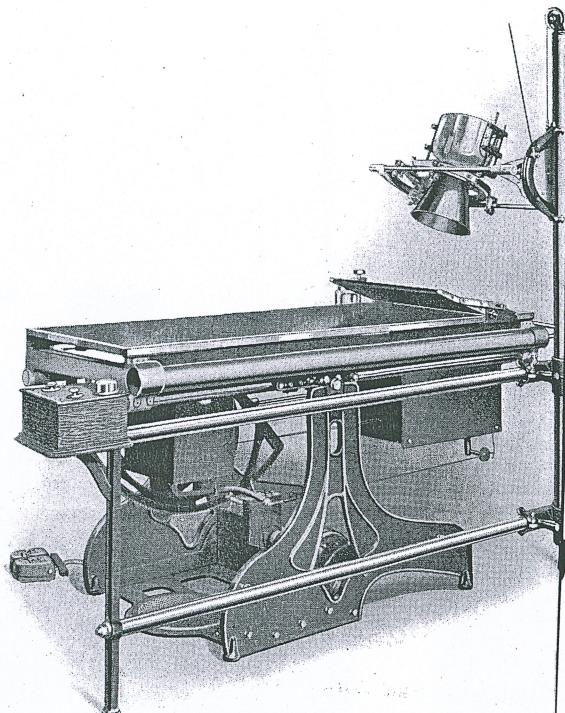
U. S. Patents  
December 19, 1911; April 22, 1913; February 29, 1916;  
August 7, 1917. Foreign Patents.  
Other Patents Pending.

Cat. No. 2087

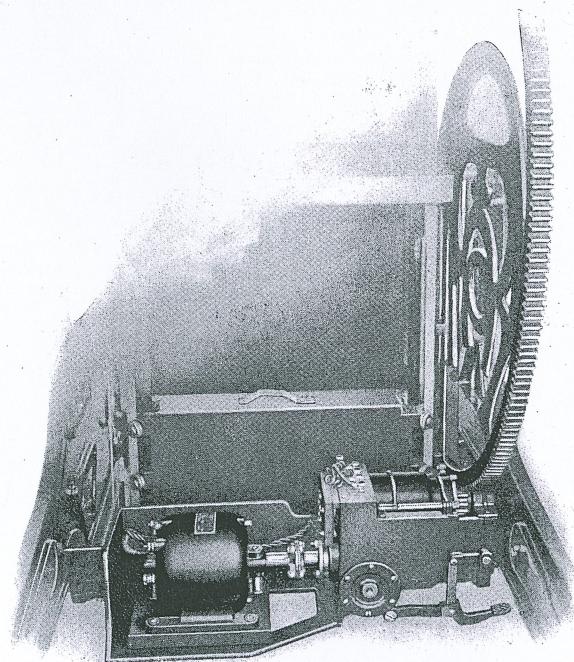
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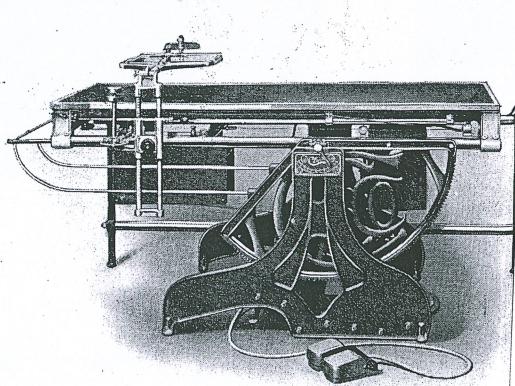
CLINIX IN VERTICAL POSITION



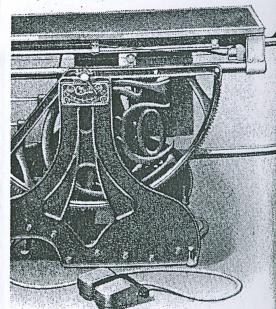
CLINIX IN HORIZONTAL POSITION  
Rear view showing Transformer and Connections



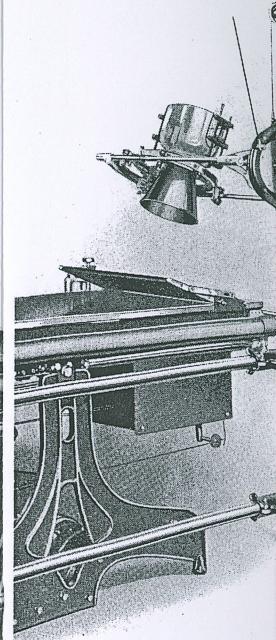
CLINIX MOTOR DRIVE AND TRANSMISSION



CLINIX IN HORIZONTAL POSITION  
Operating Side



HORIZONTAL POSITION  
Operating Side



HORIZONTAL POSITION  
Transformer and Connections

TRADE MARK

**TRANSFORMER**  
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**Clinix**

## X-Ray Plant

**Vertical - Horizontal - Angular - Stereo Radiography  
Fluoroscopy and Orthodiaphy—Motor Driven  
Self-Excited—1 to 30 Milliamperes—2 to 5-Inch Gap**

The Clinix unit is the latest development of the Tube Tilt Table. Both are original inventions of Mr. Charles E. Campbell. They have been pronounced by leading Roentgenologists as the greatest attainment in the development of X-ray apparatus and are rapidly revolutionizing X-ray technique.

The Clinix is an X-ray plant, all but the illuminators and dark room. It is a Self Excited, Motor Driven, Stereo Tube Tilt Table with a Combination Screen and Cassette Holder by which radiography as well as fluoroscopy can be done with the tube under the table. The transformer and controls are attached to and form part of the table, thus eliminating the unsightly, annoying and dangerous overhead trolley lines and high tension switch.

The patient when once placed on the Clinix remains there until a complete X-ray examination has been made in the Horizontal, Angular, Trendelenburg and Vertical positions, including fluoroscopy, radiography and orthodiaphy.

The motor drive is of indescribable value in fluoroscopic examination of the gastrointestinal tract, in accordance with the latest technique for diagnosis of adhesions, the patient being slowly tipped from the vertical to the horizontal and Trendelenburg positions while the operator has his hands free and both the operator and patient are relieved of violent physical exertion.

The transformer attached underneath eliminates the overhead trolley and makes head of the Clinix table accessible.

The Clinix combines in one compact, convenient piece of apparatus of handsome design all the advantages of more than a score of separate pieces of cumbersome and expensive apparatus.

To relocate or rearrange the apparatus of the X-ray laboratory, just move the Clinix, that's all.

The saving in plates and films alone, by accurate localization with fluoroscopic screen before making radiograph, thus allowing use of the smallest plates or films, would pay a fair return on the investment in entire outfit.

In connection with Eastman Dupli-Tized films and double intensifying screen will do all kinds of radiography.

**SPECIFICATIONS.**

**Dimensions (overall).** Length 6' 8"—Width 32" (add 3" for stand track), Height 36" to table top.

**Construction.** Entirely of metal except where electrical insulation is needed; a wood top, head and foot boards.

**Top.** Wood veneer, of careful selection, highest grade and finish. Tested by X-ray to insure a clear examination field. Opens on piano hinge for accessibility of under mechanism.

**Examination Field.** Extraordinarily large. Size, length 44 inches, width 22 inches. Enough for examination of head to pelvis and shoulder to shoulder without moving patient.

**Tube Carriage.** Arranged for Coolidge Radiator Bedside Tube (10 or 30 Millampere) and black Lead Glass Protective Shield enclosed in Bakelite insulation. Mounted on ball bearings. Counterweight runs on ball bearings inside steel tubing on rear side of table. This construction, together with elimination of the heretofore necessary heavy sheet lead covered tube box, makes a wonderfully light weight and wide range tube carriage which moves at the slightest touch.

**Stereo Shift.** Locks are provided for stereo shift of tube carriage in both directions so that stereo radiographs may be made with the table tube.

**Diaphragms.** Lead covered, opening enough to cover a 14" x 17" screen or plate at a target distance of 21½ inches, adjustable independently or together to horizontal, vertical or square opening.

**Filter.** Groove under diaphragm opening for insertion of aluminum or other filtering material.

**Automatic Plate Changer.** For stereo-radiographs with tube above or in front of table. Accommodates up to 14" x 17" plates in either direction. Operates with table in

Technical drawings illustrating the Clinix X-Ray Plant, showing the following components and operating positions:

- HORIZONTAL POSITION Transformer and Connections**: Shows the transformer and its connections in a horizontal position.
- RIZONTAL POSITION Transformer and Connections**: Shows the transformer and its connections in a horizontal position.
- HORIZONTAL POSITION Operating Side**: Shows the operating side of the Clinix in a horizontal position.
- HORIZONTAL POSITION Operating Side**: Shows the operating side of the Clinix in a horizontal position.

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either horizontal or vertical positions. Provided with air valve speed adjustment which requires no special adjustment for changing from horizontal to vertical shift. Quickly removable from end of table. A lead field cover is provided for insertion at upper end of table when this plate changer is used and can be put in place while patient is on table. Lower end of table is protected by a permanent sheet lead field cover attached to the iron frame.

**Fluoroscopic Screen and Cassette Holder.** A combination holder of aluminum with a fluoroscopic screen size 11" x 14" protected by lead glass, on the other side of which a Cassette size 11" x 14" may be quickly attached. Swivels so that plate or film may be protected from X-ray by the lead glass. Holder can be quickly changed so that the fourteen-inch dimension of screen or plate may be used laterally or longitudinally. Adjustable to any distance between 15 inches and 31 inches from target of tube to screen or plate. May be locked to maintain position irrespective of angle of table. Detachable, or may be swung and locked away from table top. Has universal movement so that screen may be tilted at any angle desired, with adjustable friction to maintain position.

**Cassettes.** Two 17" x 17" aluminum cassettes graduated to adapt to smaller plates. Inserted from side of table while in horizontal, angular or vertical position.

**Head and Foot Boards.** A head board and foot board are both provided as regular equipment, exactly alike in construction and interchangeable. Adjustable as to distance from head or foot of table. Also adjustable as to angle with relation to surface of table so that either may be used as a seat, stand, shoulder or head rest. May be tilted as a sinus block or at other angles for support of various parts of the body. Quickly adjusted and strong enough to support entire weight of a heavy patient.

**Turn Table.** Built as a part of the frame, operates on steel ball bearings and so constructed that patient may be easily rotated during fluoroscopic examination in the vertical position.

**Graduations.** No piece of X-ray apparatus was ever more thoroughly worked out and perfected in the details for convenience of the operator than the Clinix, as is evidenced in part by the graduations of each and every part where desirable to know angle or distance as follows:—Angle of table by degrees from Trendelenburg to vertical,—distance of target to screen in inches,—longitudinal travel of tube in inches,—lateral travel of tube in inches,—opening of diaphragms to cover plates or films of different sizes at various distances.

**Luminous Indicators.** To facilitate operation in the dark the handles which control movement of screen, diaphragms, and filament regulator are provided with luminous dials. The first five milliamperc indications of milliammeters are also luminous.

**Motor Drive.** Reversible motor of the repulsion type in connection with a transmission, similar to that used in an automobile, geared to a large segment gear. Operates table with patient, up or down by pressure on foot switch. Limit switches stop the motor automatically at the extreme Trendelenburg and vertical positions. A pedal for foot release of motor transmission enables manual adjustment of angle of table if quicker adjustment is needed than motor provides (maximum travel is accomplished by motor in 70 seconds). Automatically locks when pedal is released.

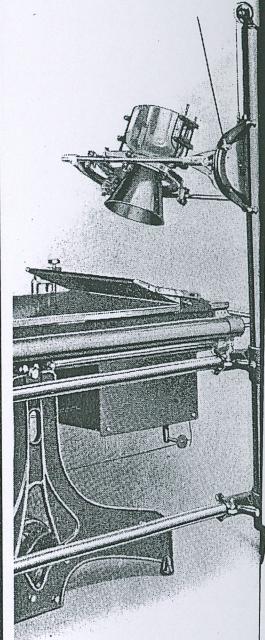
**Counter Balance.** Table top is so well balanced by distribution of the weight of transformer and by travelling counterweight that it may be tilted by one finger.

**Guard Rail.** Operating side and head of table are provided with a guard rail to prevent accidental contact with tube connections. Rear side of table is protected by tracks for tube stand and lower end by distance and the fact that secondary terminals are mounted on side of transformer facing toward head of table.

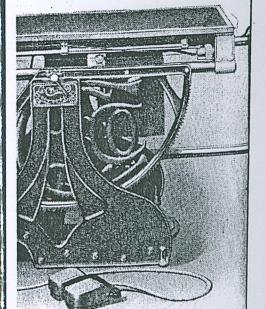
**Transformer (High Tension).** Secondary 65,000 volts. Closed core, non-fluid insulation, hardwood locked corner case. Sufficient capacity to deliver 1 to 30 milliamperes to X-ray tube with 2" to 5" spark gap.

**Transformer (Filament).** In same case with high tension transformer.

**Controls.** Control Case attached to end of table, provided with—auto transformer, voltmeter, milliammeter, auto transformer switch (adjusts line voltage to that for which apparatus is made) main switch, double throw tube switch and potential compensator switch (provides 3 different current changes and simultaneously maintains voltage or penetrative value of the X-ray). The high tension transformer attached to table is provided with a milliammeter and a filament regulator conveniently visible and operable from front of table independent of auto-transformer control case.



HORIZONTAL POSITION  
former and Connections



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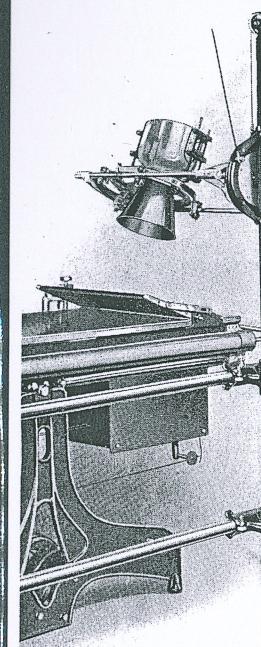
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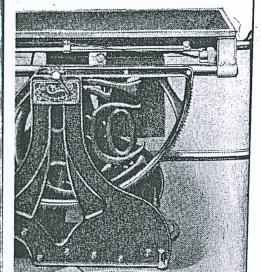
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HORIZONTAL POSITION  
Transformer and Connections



HORIZONTAL POSITION  
Operating Side



Main switch is operated by a pull cord extending entire length of table so that current may be turned on or off at any position, during examination.

**Reels.** Self-winding. Connect from transformer secondary terminals direct to X-ray tube. Take the place of overhead trolley lines with their attendant inconvenience and danger.

**Foot Switches.** Positive, quick-action, prevents arcing and burning of contacts.

**Current Required.** Operates on alternating current of 100 to 120 volts, 50 to 60 cycle, 6 to 35 amperes, according to current used in tube. Also on direct current by addition of a rotary converter and transformer which may be installed in another room. To operate tube with ten milliamperes requires a one kilowatt rotary converter. Thirty milliamperes requires a four kilowatt converter.

**Finish.** The finish of frame and top is mahogany. Other parts, polished aluminum and nickel plate.

**Tube Stand No. 6.** For radiography and therapy with tube above table. (When using tube in stand a separate high tension transformer must be used.) The No. 6 Tube Stand possesses the following exclusive features in addition to all the usual advantages. Entirely controlled from operating side of table by a single lock without reaching over. Overhang 26 inches, allows radiography of either shoulder without moving patient. Friction disc holds tube safely at any angle. Stereo shift and tilt at any point of the circumference. Slight underhang. Automatic safety lock in case cable breaks. High grade ball bearings throughout. The best of machine work. Furnished with lead glass tube shield and diaphragm, complete, ready to attach to tracks of Clinix table.

**Extra High Tension Transformer for Tube Stand,** 1 to 30 milliamperes, 3" to 5" gap, with attachments for fastening to No. 6 Tube Stand, to operate tube in stand. Travels with stand. Equipped with high-tension terminals, cord reels, filament regulator and connections to Control Case. Operated by same control which operates the table tube. Double throw switch on Control Case makes it impossible to accidentally turn current on both tubes at same time. (Sold only for use with "Clinix" Table.)

**Tube.** Self-rectifying, Coolidge Radiator Bedside Type, ten or thirty millampere.

**Patents.** This apparatus is protected by United States patents, issued Dec. 19, 1911, April 22, 1912, Feb. 29, 1916 and Aug. 7, 1917. Also by foreign patents. Other patents pending.

### PRICES

Catalog Number Complete Assembly	PRICE	
	Per Item	Total Complete Assembly
2095	\$1550.00	\$1550.00
2094	100.00	1650.00
2086	550.00	2200.00
2087	300.00	2500.00
2109	450.00	2950.00
2110	250.00	3200.00
2110	\$3200.00	\$3200.00

**Complete Clinix X-ray Plant** (Catalog No. 2110) Code word Clinix

**NOTE:**—This latter combination leaves nothing to be desired except the dark room equipment, illuminators and a few small accessories.

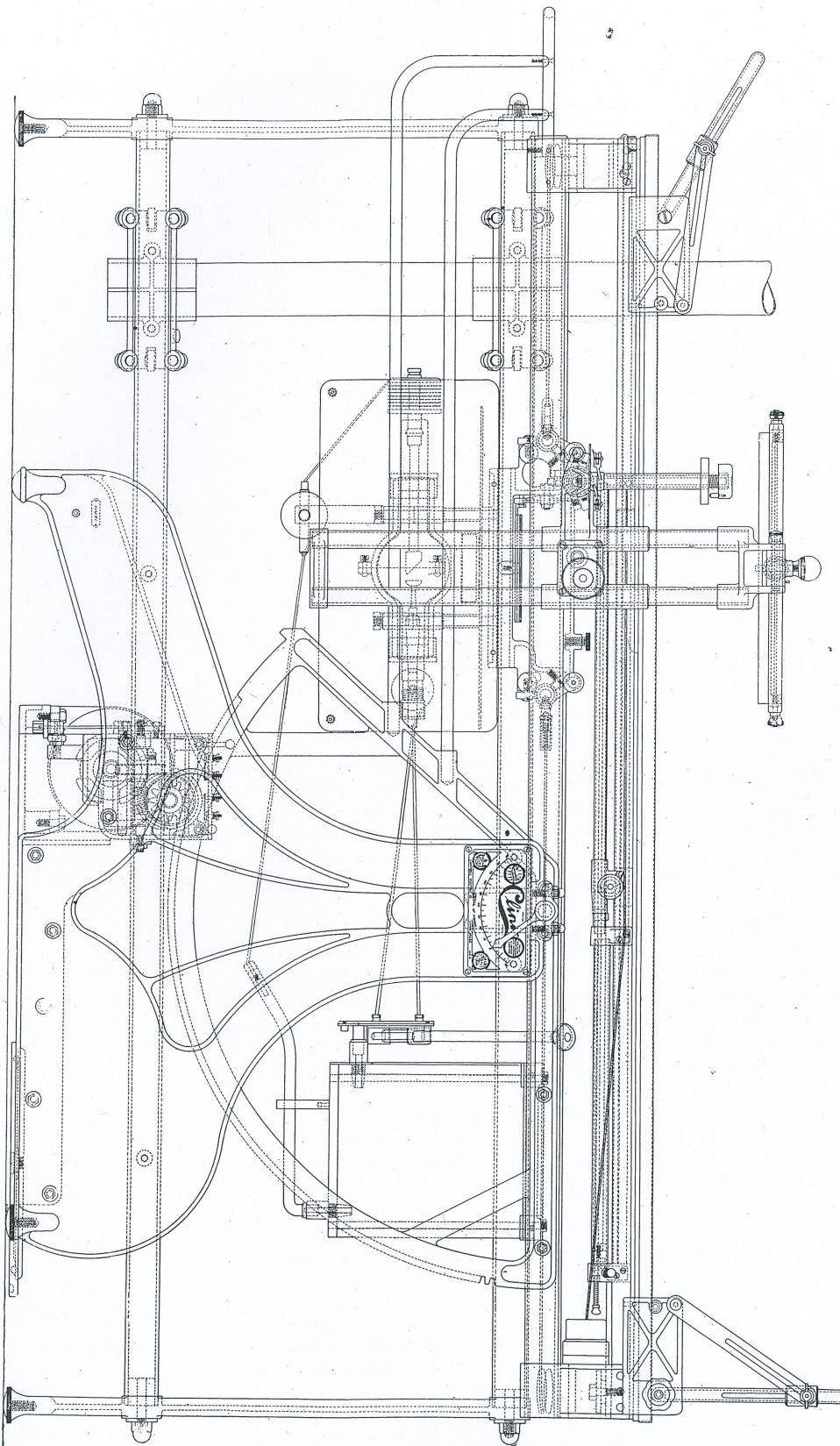
If supply is NOT alternating current of 100 to 120 Volt, 50 to 60 Cycle, one of the following must be used.  
May be installed in separate room or in basement if desired.

Cat. No. 1562 Rotary Converter and Transformer for Direct Current, (10 milliamperes in Tube) 110 Volt ..... \$225.00

Cat. No. 2115 Rotary Converter and Transformer for Direct Current, (10 milliamperes in Tube) 220 Volt ..... 275.00

Cat. No. 2113 Rotary Converter and Transformer for Direct Current, 4 Kilowatt (30 milliamperes in Tube)  
110 or 220 Volt ..... 525.00

Cat. No. 2114 Step-Down Transformer 220 Volt or 440 Volt, 60 Cycle ..... 75.00



CAMPBELL "CLINIX" X-RAY PLANT

Line drawing, illustrating in detail, mechanical construction.